UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/576,621	05/23/2000	Ryuji Ishiguro	SONY-T0608	2720

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EXAMINER
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ART UNIT	PAPER NUMBER
2131	

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>14 July 2005</u>.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-10* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

1.   The amendment filed on 14 July 2005 has been noted and made of record.

2.   Claims 1-10 have been presented for examination.

Response to Arguments

3.   Applicant's arguments with respect to claim 1-10 have been considered but are moot in view of the new ground(s) of rejection.

4.   See further rejection that follows.

Claim Rejections - 35 USC § 103

5.   The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6.   Claims 1 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,883,958 to Ishiguro et al., hereinafter Ishiguro, in view of U.S. Patent No. 5,457,746 to Dolphin, hereinafter Dolphin.

7.   As per claims 1 and 4-6, Ishiguro teaches an information processing apparatus comprising:

storage means for storing content data encrypted with an encryption key (column 3, lines 54-65, i.e. "multiple sets of public keys used to encrypt the MPEG-coded video data retrieved from the DVD-ROM");

holding means for holding management information associated with said content data stored in said storage means, wherein said management information includes calculation information (Figures 5 [block 11], 6, 7, 11, column 3, lines 54-65, column 6, lines 20-36, column 6, line 41 to column 7, line 41, column 8, liens 21-28, i.e. "multiple sets of public keys used to

encrypt the MPEG-coded video data retrieved from the DVD-ROM and associated validity flags

are recorded as a key table," "invalid public key is indicated by a validity flag marked by an 'x'"

Since the calculation is dependent on the validity of the public key – the flag indicating whether

the public key is valid/invalid serves as calculation information);

memory means for storing the result of the calculation performed by said calculation

means (column 4, lines 35-50, i.e. "the challenge calculated as described above is sent to

controller of the MPEG decoder board");

control means for comparing the result of the calculation performed by said calculation

means with a previous calculation result stored in said memory means and controlling use of said

content data stored in said storage means in accordance with the result of the comparison

(column 4, line 43 to column 5, line 15).

8.   Ishiguro does not disclose calculation means for performing a predetermined calculation

on the basis of said encryption key and said calculation information, said calculation information

including updateable information which is updated upon execution of a predetermined operation

performed on the content data.

9.   Dolphin teaches calculation means for performing a predetermined calculation on the

basis of said encryption key and said calculation information, said calculation information

including updateable information which is updated upon execution of a predetermined operation

performed on the content data (Figure 7, column 7, lines 21-28, column 9, line 52 to column 10,

line 8).

10.   Both Ishiguro and Dolphin are related in the field of controlling access to distributed

content.

11.   It would have been obvious to one of ordinary skill in the art at the time the invention

made to include calculation means for calculating information based on the encryption key and

calculation information, since Dolphin states at column 2, lines 16-43 that such a modification

would aid in protecting information from unauthorized access while providing security at both

on the publishing and subscriber side.

12.   Claims 2, 3, and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Ishiguro in view of Dolphin, and in further view of U.S. Patent No. 6,751,598 to Yagawa et al.,

hereinafter Yagawa.

13.   Regarding claims 2 and 7, Ishiguro and Dolphin do not teach wherein said calculation

means performs said calculation by applying a hash function to said calculation information and

said encryption key.

14.   Yagawa teaches wherein said calculation means performs said calculation by applying a

hash function to said calculation information and said encryption key (column 8, line 52-57).

15.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to apply a hash function to the data, since Yagawa states at column 8, lines 52-57 that

such a modification would serve as a way to authenticate to continue providing the content to the

user.

16.   Regarding claims 3 and 8, Ishiguro and Dolphin do not disclose wherein said calculation

information includes identification information identifying said data; and said holding means

holds said update information in an area which is not allowed to be read or written for a general
purpose.

17.   Yagawa teaches wherein said calculation information includes identification information
identifying said data (Figures 1 [block 46], 3 [block 46], 4 [block 436], 5 [blocks 442, 443], 8
[blocks 632, 633, 638], 10 [block 86]; column 6, lines 30-55; column 8, lines 2-18; column 8,
line 47 to column 9, line 21; column 10, line 55 to column 11, line 37; column 13, line 55 to
column 14, line 43); and

        said holding means holds said update information in an area which is not allowed to be
read or written for a general purpose (Figures 1 [block 22], 3 [blocks 44, 46], 5 [blocks 441, 442,
443], 8 [blocks 632, 633, 638], 10 [block 84]; column 5, lines 42-56; column 6, lines 30-55;
column 9, lines 7-21; column 10, line 55 to column 11, line 36; column 13, lines 18-38).

18.   Yagawa does not teach wherein said content data is music data.

19.   It would have been obvious to one of ordinary skill in the art at the time the invention
was made to apply the invention of Yagawa to music data, since Yagawa states in columns 3 and
4 that the present invention is directed to blocking the piracy of digital data and preventing the
use of illegally obtained copies.

20.   As per claims 9 and 10, Ishiguro discloses an information system, comprising:

        storing content data (column 3, lines 54-65);

        comparing a previously calculated value with the hash value of the content data

calculated (column 4, line 43 to column 5, line 15); and

controlling reproduction of the content data based on the result of the comparison

performed (column 4, line 43 to column 5, line 15).

21.   Ishiguro does not disclose setting a sequential number corresponding to the content data,

the sequential number incremented by one when an operation is performed on the content data;

calculating a hash value corresponding to the data by performing a predetermined calculation

using at least a part of the content data and the sequential number; and wherein the calculated

value is a calculated hash value.

22.   Dolphin discloses setting a sequential number corresponding to the content data, the

sequential number incremented by one when an operation is performed on the content data

(Figure 7, column 7, lines 21-28, column 9, line 52 to column 10, line 8);

23.   calculating a value corresponding to the data by performing a predetermined calculation

using at least a part of the content data and the sequential number (Figure 7, column 7, lines 21-

28, column 9, line 52 to column 10, line 8).

24.   Both Ishiguro and Dolphin are related in the field of controlling access to distributed

content.

25.   It would have been obvious to one of ordinary skill in the art at the time the invention

made to include calculation information, since Dolphin states at column 2, lines 16-43 that such

a modification would aid in protecting information from unauthorized access while providing

security at both on the publishing and subscriber side.

26.   Yagawa wherein the calculated value is a calculated hash value (column 8, line 52-57).

27.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to apply a hash function to the data, since Yagawa states at column 8, lines 52-57 that

such a modification would serve as a way to authenticate to continue providing the content to the user.

Conclusion

28.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

29.   The following patents are cited to further show the state of the art with respect to digital right's management, such as:

United States Patent No. 6,256,391 to Ishiguro et al., which is cited to show preventing illegal copying of copyrighted media.

United States Patent No. 6,519,701 to Kawamura et al., which is cited to show demanding an access right from a personal computer to a DVD.

United States Patent No. 6,615,353 to Hashiguchi, which is cited to show controlling access to media using control equipment.

United States Patent No. 6,138,203 to Inokuchi et al., which is cited to show enables a write once type disc to be used as a rewritable recording medium.

United States Patent No. 5,978,812 to Inokuchi et al., which is cited to show enables a write once type disc to be used as a rewritable recording medium.

United States Patent No. 6,144,969 to Inokuchi et al., which is cited to show converting a file name that can be distinguished by a given operating system that can be distinguished by a different operating system.

United States Patent No. 5,673,316 to Auerbach et al., which is cited to show create, distribute, sell and control access to digital documents using cryptographic envelopes.

United States Patent No. 5,530,752 to Rubin, which is cited to show protecting software from unauthorized use and copying.

30.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian La Forgia whose telephone number is (571) 272-3792. The examiner can normally be reached on Monday thru Thursday 7-5.

31.   If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

32.   Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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